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In The

Supreme Court of the United States

October Term, 1982

MOTOR VEHICLE MANUFACTURERS ASSOCIATION OF THE UNITED STATES, INC., *et al.*,
Petitioners,
v.
STATE FARM MUTUAL AUTOMOBILE INSURANCE COMPANY, *et al.*,
Respondents.

CONSUMER ALERT AND PACIFIC LEGAL FOUNDATION,
Petitioners,
v.
STATE FARM MUTUAL AUTOMOBILE INSURANCE COMPANY, *et al.*,
Respondents.

UNITED STATES DEPARTMENT OF TRANSPORTATION, *et al.*,
Petitioners,
v.
STATE FARM MUTUAL AUTOMOBILE INSURANCE COMPANY, *et al.*,
Respondents.

On Writs of Certiorari to the United States Court of Appeals for the District of Columbia Circuit

BRIEF OF AMICI CURIAE EPILEPSY FOUNDATION OF AMERICA AND NATIONAL SOCIETY TO PREVENT BLINDNESS

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TABLE OF CONTENTS

Page

TABLE OF AUTHORITIES ii

INTEREST OF AMICI CURIAE 1

SUMMARY OF ARGUMENT 3

ARGUMENT 5

I. EPILEPSY AND BLINDNESS ARE TWO OF THE TRAGIC CONSEQUENCES OF PREVENTABLE MOTOR VEHICLE INJURIES 5

A. Magnitude of the Problem 5

B. The Costs of Epilepsy and Blindness To Individuals and Society Illustrate the Importance of Implementing Available Preventive Measures 7

II. THE IMPORTANCE OF PREVENTION 11

A. The Benefits To Be Realized From the Prevention of Motor Vehicle Injuries Cannot Be Overemphasized 11

B. These Benefits Far Outweigh Any Slight Infringement of Personal Choice Due to the Passive Restraint Program 12

CONCLUSION 13

TABLE OF AUTHORITIES

Page

Annegers, Grabow, *et al.*, *Seizures After Head Trauma: A Population Study*, 30 NEUROLOGY 683 (1980) 5

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Commission for the Control of Epilepsy and Its Consequences, *Plan For Nationwide Action On Epilepsy*, Vol. I-IV (DHEW Publication Nos.: 78-276, 78-279, 78-311) (1978) 5, 8, 10, 11, 12

Hartunian, Smart and Thompson, *The Incidence And Economic Costs Of Major Health Impairments (1981)* 8

Hartunian, Smart and Thompson, *The Incidence and Economic Costs of Cancer, Motor Vehicle Injuries, Coronary Heart Disease, and Stroke: A Comparative Analysis*, 70 AM. J. PUB. HEALTH 1249 (1980) 4

Huelke, O'Day and Barhydt, *Ocular Injuries In Automobile Crashes*, 22 J. TRAUMA 50 (1982) 7

Insurance Institute For Highway Safety, *Policy Options for Reducing the Motor Vehicle Crash Injury Cost Burden* (1981) 4

Insurance Institute For Highway Safety, Preliminary national estimates calculated in 1983 based upon: Kraus, *A Case Study On Case Specific Incidence of Head Injury in a Defined Population (San Diego County), With Particular Emphasis on Outcomes* (to be published) 6

Karlson, *The Incidence of Hospital-treated Facial Injuries from Vehicles*, 22 J. TRAUMA 303 (1982) 6, 7

Karlson, Preliminary report on eye injuries from unpublished data 7

Page

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National Safety Council, *Accident Facts* (1979) 5

Poleck, *The Body . . . What Happens To It In A Crash*, 1967 TRAFFIC SAFETY 17 5

Rusk, *The Importance of Accident Prevention*, 1956 N.Y.S. J.MED. 3870 3

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BRIEF OF AMICI CURIAE EPILEPSY FOUNDATION OF AMERICA AND NATIONAL SOCIETY TO PREVENT BLINDNESS

INTEREST OF AMICI CURIAE

The Epilepsy Foundation of America (EFA), founded in 1968, is the only national, charitable, nonprofit voluntary agency in the United States specifically dedicated to the welfare of people with epilepsy.

It is the Foundation's mission to prevent epilepsy and its consequences, and to help persons with epilepsy, their families, and other concerned individuals, overcome the problems associated with the disorder. EFA works to achieve these goals through a broad range of programs of information and education, advocacy, support of research, and the delivery of needed services to people with epilepsy and their families.

Epilepsy is a disorder that often evokes stereotyped images and fears despite vast improvements in medical knowledge and treatment of the condition. Since its inception, the Epilepsy Foundation of America has stood against the stigma and estrangement associated with epilepsy. The Foundation has encouraged society to view the person with epilepsy in a realistic fashion – as an individual who has many capabilities and whose dysfunction is often quite limited in scope and in time.

At the same time the Epilepsy Foundation has always recognized that epilepsy and its consequences can have a severe adverse impact on individuals and their families with a resultant high cost to these individuals and to society.

The National Society to Prevent Blindness, a nonprofit, independent, voluntary health agency, has since 1908 been dedicated to reducing and ultimately to eradicating the 23,000 needless cases of blindness that occur in the United States each year.

The Society's sole purpose is the prevention of blindness. One area in which prevention is particularly effective is eye injuries, which have caused nearly one million people in the United States to suffer visual impairments. Five percent of all eye injuries from consumer products occur

in connection with automobiles. The Society has joined this Brief due to its interest in the employment of effective measures to prevent these injuries.

The purpose of this *amicus curiae* brief, filed with the written consent of the parties,[1] is to present the Court with information on the causes and consequences of epilepsy and blindness, with particular emphasis on the high individual and societal costs associated with these conditions and the obvious benefits to be achieved by their prevention.

Amici, through their staffs and volunteers, are familiar with the issues presented in this proceeding and hope that this brief aids the Court's understanding of the importance of measures aimed at preventing epilepsy and blindness and their devastating consequences.

SUMMARY OF ARGUMENT

In a symposium on the importance of accident prevention, the Director of the Institute of Physical Medicine and Rehabilitation at New York University-Bellevue Medical Center described a statistic which understandably amazed him. He stated that the bloodiest fighting in World War II "and the days of our highest casualties were the first ten days after D-day. We lost, killed and wounded, on the beachheads of Normandy 11,000 men. During those same ten days we lost 26,000 civilians, killed and wounded, on the highways and in the industry of this country. . . ."[2]

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[1]Copies of letters indicating the parties' consent have been filed with the Clerk of the Court.

[2]Rusk, *The Importance of Accident Prevention*, 1956 N.Y.S.J MED. 3853, 3870.

This truly is a startling statistic. What is more shocking, however, is that more than three decades later, these fatal and disabling accidents on our nation's highways continue unabated. There are more than 4 million new cases of motor vehicle injuries each year,[3] and deaths from such injuries have exceeded 50,000 in each year since 1978.[4] The costs associated with these injuries are staggering. In 1975, deaths and injuries from motor vehicle accidents cost our nation 14.4 billion dollars.[5] In 1980 dollars the cost has reached more than 20 billion dollars.

These numbers alone are astounding. Only when compared with other health problems, however, are we better able to see the tragedy represented by the numbers. Among the nation's leading health problems, costs associated with motor vehicle crash injuries are second only to those associated with cancer. These costs exceed those of coronary heart disease and stroke, the other leading killers of Americans.[6] Moreover, automobile accidents are the leading cause of death of Americans between the ages of 1 and 35.[7]

The knowledge and technology necessary to reduce these costly tragedies exist in our nation today, and they have been proven effective. Prevention of death and disability on our nation's highways is a readily achievable goal. Progress toward this goal will be greatly enhanced through

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[3]Hartunian, Smart and Thompson, *The Incidence and Economic Costs of Cancer, Motor Vehicle Injuries, Coronary Heart Disease, and Stroke: A Comparative Analysis,* 70 AM. J. PUB. HEALTH 1249, 1253 (1980) [hereinafter cited as Hartunian].

[4]National Safety Council, *Accident Facts,* (1982).

[5]Hartunian, *supra* note 3, at 1257.

[6]*Id.* at 1249.

[7]Insurance Institute For Highway Safety, *Policy Options for Reducing the Motor Vehicle Crash Injury Cost Burden* at 1 (1981).

reinstatement of Federal Motor Vehicle Safety Standard 208 — the Passive Restraint Standard.

ARGUMENT

I. EPILEPSY AND BLINDNESS ARE TWO OF THE TRAGIC CONSEQUENCES OF PREVENTABLE MOTOR VEHICLE INJURIES

A. Magnitude of the Problem

Head and facial injuries are two of the most common and most serious consequences of motor vehicle accidents. Studies reveal that head injury occurs in 71 percent of persons injured in automobile accidents.[8] Such accidents accounted for the incapacitating head injuries suffered by 18,000 children and adolescents in 1978.[9] In 1977 the Commission for the Control of Epilepsy and Its Consequences ("the Commission") in its report to Congress and the President[10] estimated an annual incidence of 540,000 head injuries from motor vehicle accidents.[11]

Epilepsy has long been recognized as an important complication of head injury. While epilepsy may result from any injury to the head, studies show that the likelihood of developing post-traumatic epilepsy is most closely related to the extent of brain involvement in the injury.[12] The

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[8]Poleck, *The Body . . . What Happens To It In A Crash,* 1967 TRAFFIC SAFETY 17.

[9]National Safety Council, *Accident Facts* (1979).

[10]Commission for the Control of Epilepsy and Its Consequences, *Plan For Nationwide Action On Epilepsy,* Vol. I-IV (DHEW Pub. Nos.: 78-276, 78-279, 78-311) (1978) [hereinafter cited as *Commission's Report*].

[11]*Commission's Report, supra* note 10, Vol. I at 33.

[12]Annegers, Grabow, *et al., Seizures After Head Trauma: A Population Study,* 30 NEUROLOGY 683, 683 (1980); Caveness, *Epilepsy, A Product of Trauma In Our Time,* 17 EPILEPSIA 207, 208 (1976); Walker, Leuchs, *et al., Life Expectancy of Head Injured Men With and Without Epilepsy,* 24 ARCH. NEUROL. 95, 100 (1971).

significance of this connection is evident in light of a recent study placing the number of brain injuries suffered annually by motor vehicle occupants in the United States at nearly 92,000.[13] It must be assumed that a significant proportion of the people represented by this number will develop epilepsy.

Facial injury is another important sequela of motor vehicle accidents. A study was conducted of the annual incidence of hospital-treated facial injuries from vehicle crashes suffered by Dane County, Wisconsin residents.[14] Based upon the population of the United States, the rates from that study yield an estimated 625,000 hospital-treated facial injuries in the nation each year, including 146,000 severe facial lacerations and 29,000 severe facial fractures.[15] When all sources of facial injuries were examined, vehicle crashes were found to be the single leading cause of the most severe of these injuries. Among all types of vehicles involved, automobile occupants accounted for 50 percent of the annual incidence of facial injuries; suffered a disproportionately large percentage of the most severe facial lacerations; and suffered more facial fractures and more severe facial fractures than others injured in vehicle crashes.[16] Hospital medical records mentioned

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[13]Preliminary national estimates calculated in 1983 by the Insurance Institute For Highway Safety based on: Kraus, J.F., Ph.D., Professor of Epidemiology, School of Public Health, Univ. of Calif., at L.A., *A Case Study On Case Specific Incidence of Head Injury in a Defined Population (San Diego County), With Particular Emphasis on Outcomes,"* (to be published).

[14]Karlson, *The Incidence of Hospital-treated Facial Injuries From Vehicles,* 22 J. TRAUMA 303 (1982).

[15]*Id.* at 305.

[16]*Id.*

the steering wheel most often as the object of facial impact for drivers. Windshield impact was also a source of driver injuries, particularly facial lacerations. Windshields were the main source of passenger facial injury, while instrument panels and other structures in the occupant area were involved as well.[17]

Eye injuries account for a large portion of these facial injuries. It is estimated that nationally, there are nearly 39,000 eyelid and periorbital injuries alone, more than 7000 of which are serious.[18] Research using data collected by the National Crash Severity Study indicates the severity of these eye injuries. The study involved occupants of cars involved in collisions, from January 1977 through March 1979, which resulted in the towing of at least one car. The results indicate that one out of every 4000 occupants of towed vehicles suffered some permanent eye impairment and that one eye was blinded for every 7000 occupants. This leads to an annual national incidence of 535 persons suffering a visual impairment and 265 persons blinded in one eye as a result of motor vehicle crashes.[19]

B. The Costs of Epilepsy and Blindness To Individuals and Society Illustrate the Importance of Implementing Available Preventive Measures

As stated earlier motor vehicle accidents cost this nation approximately 20 billion dollars each year. It is extremely difficult, maybe impossible, to grasp what this

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[17] *Id.*

[18] Preliminary report on eye injuries from unpublished data of Trudy Karlson, Associate with the Center for Health Systems Research and Analysis, Univ. of Wisconsin, Madison.

[19] Huelke, O'Day and Barhydt, *Ocular Injuries In Automobile Crashes*, 22 J. TRAUMA 50, 53 (1982).

figure means. We can approach a better understanding of what it represents, to individuals and to society, by realizing that it is comprised of direct and indirect costs,[20] as well as many intangible costs.

Direct costs are actual expenditures, including those for emergency services, inpatient hospital care, insurance administration and litigation. Persons suffering severe nonfatal injuries often have additional expenses for rehabilitative services, drugs and medical supplies, repeated doctor or hospital visits and follow-up tests. For chronic conditions resulting from these injuries, many of these costs continue throughout a person's life.

Indirect costs represent lost productivity stemming from premature death or injury-related disability. This may take the form of a temporary absence from work, or in the case of more severe injuries, an inability to perform all or most of one's work activities due to a permanent disability. In the latter cases indirect costs may also continue for the remainder of one's life.

Epilepsy is a prime example of a condition which results in recurrent direct and indirect costs. The Commission estimated that the cost of epilepsy to the nation was 3.6 billion dollars in 1975.[21] In 1980 dollars, the total cost is 5 billion dollars.

The wide ranging consequences of epilepsy illustrate the enormous costs that individuals and society must bear for the treatment and support of the person with epilepsy. Some of these direct costs are readily apparent – medical

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[20]This discussion is based on the analysis presented in Hartunian, Smart and Thompson, *The Incidence and Economic Costs Of Major Health Impairments,* at 287-349 (1981).

[21]*Commission's Report, supra* note 10, Vol. IV at 118.

costs including physician care, medication, hospitalization, the treatment needs of the severely disabled for continuous or residential care, as well as costs for special education, research, vocational rehabilitation and increased insurance rates. Indirect costs result not only from inability to work but frequently from a reduced period of productivity due to a shortened life span. While some persons with epilepsy and their families are able to shoulder this burden themselves, society absorbs much of the cost in order to sustain and support individuals who have not been able to attain economic independence due to the seriousness of their condition or because of societal attitudes toward them.

The inability to afford these expenses is often a result of the less apparent consequences of epilepsy which significantly add to the personal and societal costs. These are largely the result of the unfortunate social consequences that accompany epilepsy due to the stereotyped images and misunderstanding associated with the disorder. The Commission found that every person affected by epilepsy experiences social, psychological and behavioral problems in degrees ranging from coping with and adjusting to the daily fears and uncertainties associated with epilepsy, to more severe problems which create effective barriers to social adjustment, to obvious psychiatric disorders.

These factors contribute to an unemployment rate among persons with epilepsy which is twice the national average. This rate exists despite dramatic advances in treatment and rehabilitation allowing a large percentage of those with epilepsy to lead seizure free lives, and regardless of federal and state prohibitions against discrimination in hiring because of a handicapping condition. The Commission recognized the even greater percentage of people who "are underemployed, working in low-paying, menial positions with

little opportunity for advancement or change simply because they can find nothing else. The result is an immense waste of human potential among those who have minimum disability and those who are severely handicapped."[22]

The dollar costs are only part of the picture, however. The human costs of epilepsy are immeasurable. We cannot measure the suffering, embarrassment, isolation, and alienation experienced by many people with epilepsy, nor the frustrations of being unable to find effective treatment, of being turned down for a job, insurance or a driver's license, or of being rejected by family and friends. As the Commission stated

> [a]ny effort to picture the problem of epilepsy in terms of numbers conveys little of its true meaning, which must be understood in human terms. Each . . . seizure . . . represents an interruption in the life of an individual — a deviation of function setting that person apart and cutting him off from natural social and vocational contacts. The threat is ever-present — and no one can predict the time or place when a seizure may occur. It is no wonder that so many appear emotionally disturbed. Possibly it is more surprising that a majority do lead normal lives, interrupted only by the occasional episode which they and their associates have learned to take in stride.[23]

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[22] *Commission's Report, supra* note 10, Vol. I at 85.

[23] *Id.* at 26.

II. THE IMPORTANCE OF PREVENTION

A. The Benefits To Be Realized From the Prevention of Motor Vehicle Injuries Cannot Be Overemphasized

Many people develop epilepsy for no known or apparent reason, others from illnesses which may or may not have been avoided. While medical research works toward prevention of epilepsy following exposure to a potential seizure-inducing injury, and toward better treatment once epilepsy develops, more emphasis needs to be placed on earlier prevention, to remove known causative agents. Realizing this, the Commission established as one of its specific goals "[t]o reduce substantially the number of people who suffer from epilepsy by discovering and applying effective methods for the prevention of various forms of epilepsy."[24] The Commission found that in some cases such methods already exist. Its Report cites highway safety as possibly the outstanding example of a situation where available knowledge and existing technology are not being used. There are so many new cases of epilepsy each year for which there is no known cause, that the failure to apply proven preventive measures is inexplicable and inexcusable.

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[24] *Id.* at 13.

B. These Benefits Far Outweigh Any Slight Infringement of Personal Choice Due to the Passive Restraint Program

The Commission highlighted the prevention of head injury, particularly that caused by motor vehicle accidents "because head injury is such a clearly preventable cause of epilepsy, prevention could achieve immediate social and economic benefits, and the remedies are immediately applicable."[25] The Commission realized, however, that the nationwide cry for individual rights is one of the most serious bars to strict federal control of highway regulations. Recognizing that this is similar to the arguments made against mandatory motorcycle helmet laws the Commission stated that this "[c]oncern for individual freedom fails to recognize that it is the insurance companies and ultimately the public who must pay the cost for this type of self expression. . . ."[26]

In comments submitted to the Senate in hearings on automatic crash protection devices the Epilepsy Foundation of America stated that in the area of highway safety the personal liberty argument must be questioned when society must provide medical and custodial care following injury. "[P]ersonal freedoms must be tempered by personal and governmental responsibilities, especially in dealing with issues that have such potential impact upon an individual and his or her family, our health care system, and the well-being of society as a whole."[27]

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[25] *Commission's Report, supra* note 10, Vol. II Pt. 1 at 122.

[26] *Id.* at 123.

[27] Epilepsy Foundation of America, Statement submitted to the Senate Commerce, Science and Transportation Committee, Subcomm. on the Consumer; Hearings on Automatic Crash Protection Devices, Sept. 22, 1977.

CONCLUSION

Motor vehicle accidents are a leading cause of death in this country. Likewise, they are largely responsible for a diminished quality of life due to new cases of epilepsy, loss of sight, and other nonfatal consequences of accidental injury. While we may measure some of the costs of these deaths and injuries, we cannot assign any value to the difficulties physically disabled persons face in trying to achieve full and equal participation in our society.

Although political administrations change, and with them policies and administrative programs, the facts do not change, and the legal arguments must not be allowed to obscure these facts – that while litigation continues, and while administrators seek additional research on protective systems which have already been proven effective, people continue to be killed and disabled on the nation's highways.

For these reasons, the Epilepsy Foundation of America and the National Society to Prevent Blindness urge this Court to affirm the judgment and mandate of the Court of Appeals.

Respectfully submitted

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